



## Labs21 Best Practice Guides Application Form

**I**F YOU ARE INTERESTED IN SERVING as a **Lead Developer** or **Contributing Author** for one or more of the Labs21 Best Practice Guides, please fill out this application form. For each topic you select, please identify the role you would like to play in developing the guide. Fax your completed form to 703 841-1440.

After you submit your application form, you will be contacted by a Labs21 representative to discuss your interest in this project. Please be aware that your participation in this effort is completely voluntary and that, while you will be recognized by Labs21 for your contributions, you will not receive any monetary compensation. Also, Labs21 will have wide, unrestricted use of the finished product. Prior to beginning work on this project, you will be asked to confirm your understanding of the standard government restrictions on how the best practice guides can be used and distributed.

### Participant Information

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

Fax your completed form to 703 841-1440.



[www.epa.gov/labs21century](http://www.epa.gov/labs21century)



## Best Practice Guides

Labs21 has identified **bold** items as high priority topics. Note that for some topics, guides are already under development and may not need Lead Developers and/or Contributing Authors. These are marked “N/A.”

Design Area	Best Practice Guide	Lead Developer	Contributing Author
Sustainable Sites	<ul style="list-style-type: none"> <li>• <b>Modeling of airborne releases</b></li> <li>• Post-construction testing and certification of airborne releases</li> <li>• Effluent minimization and mitigation</li> </ul>	N/A <input type="checkbox"/>  <input type="checkbox"/>	N/A <input type="checkbox"/>  <input type="checkbox"/>
Water Efficiency	<ul style="list-style-type: none"> <li>• <b>Water conservation in laboratories</b></li> </ul>	N/A	<input type="checkbox"/>
Energy – Loads	<ul style="list-style-type: none"> <li>• <b>Optimize ventilation requirements</b></li> <li>• <b>Minimize simultaneous heating and cooling</b></li> <li>• <b>Right-size laboratory equipment loads</b></li> <li>• <b>Daylighting in laboratories</b></li> <li>• High performance facades</li> <li>• Optimize temperature and humidity setpoints</li> </ul>	N/A N/A <input type="checkbox"/>  N/A <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  N/A <input type="checkbox"/> <input type="checkbox"/>
Energy – Ventilation	<ul style="list-style-type: none"> <li>• <b>Efficient fume hood systems</b></li> <li>• <b>Low-pressure drop distribution system</b></li> <li>• <b>Manifolded exhaust systems</b></li> <li>• <b>Specifying efficient fans, motors, drives</b></li> <li>• <b>Ventilation system control strategies</b></li> </ul>	N/A N/A <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/>	N/A N/A <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/>
Energy – Cooling & Heating	<ul style="list-style-type: none"> <li>• <b>Energy recovery</b></li> <li>• <b>Efficient chiller systems for laboratories</b></li> <li>• Thermal energy storage</li> <li>• Evaporative cooling</li> <li>• Desiccant dehumidification</li> <li>• Efficient boiler systems for laboratories</li> <li>• Waste water heat exchangers</li> <li>• Gas-driven humidification</li> </ul>	N/A <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>	N/A <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>
Energy – Commissioning	<ul style="list-style-type: none"> <li>• <b>New construction commissioning</b></li> <li>• <b>Retro-commissioning</b></li> </ul>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Energy - Lighting	<ul style="list-style-type: none"> <li>• <b>Efficient electrical lighting in laboratories</b></li> </ul>	N/A	<input type="checkbox"/>

# Labs for the 21st Century

Design Area	Best Practice Guide	Lead Developer	Contributing Author
Energy – Supply	<ul style="list-style-type: none"> <li>• <b>Combined heat and power</b></li> <li>• Onsite renewable energy strategies for laboratories</li> </ul>	N/A <input type="checkbox"/>	N/A <input type="checkbox"/>
Energy – Electrical Systems	<ul style="list-style-type: none"> <li>• Specify energy efficient laboratory equipment</li> <li>• Configure equipment to minimize internal heat gain</li> <li>• Strategies to minimize electrical distribution losses</li> </ul>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Materials and Resources	<ul style="list-style-type: none"> <li>• Strategies to track and manage hazardous materials stream</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
Indoor Environmental Quality	<ul style="list-style-type: none"> <li>• <b>Fume hood and laboratory commissioning</b></li> <li>• <b>CFD modeling to optimize indoor air flow</b></li> <li>• <b>Room pressure control</b></li> <li>• Self-identifying and failsafe alarm systems</li> <li>• Displacement ventilation in laboratory spaces</li> </ul>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Laboratory Design	<ul style="list-style-type: none"> <li>• <b>Design for flexibility and reconfigurability</b></li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
Design Process	<ul style="list-style-type: none"> <li>• <b>Sustainable design process with Labs21 Tool Kit</b></li> </ul>	N/A	N/A
Other	Please list your additional suggestions:		

## Additional Information

1. Please describe your relevant experience for each selected topic.

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2. Please list your professional qualifications and license(s).

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3. Please highlight your publication record.

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4. Are you willing to work on an inter-organizational team to develop the guide?

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